

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended): A method of surveillance ~~viewing image data from using a~~ plurality of cameras comprising:

at said cameras, capturing a plurality of still frames;

generating, from said plurality of still frames, a sequence of digital image data sets representing visually perceptible images;

at said cameras, transmitting said sequence to a camera coordinator, said camera coordinator receiving digital image data set sequences from multiple cameras;

at said camera coordinator, determining, using said digital image data set sequences, whether an incident is associated with one or more frames in said sequence and/or one or more cameras in said sequence;

from said camera coordinator, transmitting said digital image data set sequences for which an incident is associated over a network to an image server, said image server not local to one or more locations performing said capturing and not local to one or more locations of clients for viewing;

storing said sequence at said image server; and

providing said sequence from said image server to one or more clients for viewing by a user.

2. (original): The method according to claim 1 wherein said sequence stored at said image server is stored in a format designed for still image display on a client browser.

3. (currently amended): The method according to claim 1 wherein said determining comprises resolving incidents from multiple cameras into an incident sequence. sequencee ~~stored at said image server is stored in a format allowing for a pixel to be encoded as a transparent pixel.~~

4. (currently amended): The method according to claim 1 wherein said sequence stored at said image server comprises a full frame and one or more subsequent differential frames indicating still frames captured at different times wherein pixels in a differential frame with values within a threshold of corresponding pixels in a preceding frame are set to transparent.

5. (original): The method according to claim 1 wherein said generating creates a sequence of full and differential frames in a format designed for still image display on a client browser and allowing for a pixel to be encoded as a transparent pixel.

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6. (original): The method according to claim 5 wherein said sequence is transmitted to said camera coordinator, stored at said camera coordinator, transmitted to said image server, stored at said image server, and viewed by a client all using an image encoding format for still image display on a client browser and allowing for a pixel to be encoded as a transparent pixel.

7. (cancelled)

8. (currently amended): The method according to claim 2 wherein said format is one or more of:

the GIF format;

the PNG format;

the BMP format; or

the JPEG format.

9. (original): The method according to claim 1 wherein said determining comprises computing a percentage value for a differential frame indicating a calculated percentage change between said differential frame and a preceding frame.

10. (original): The method according to claim 1 wherein said determining comprises comparing a single still frame to a preceding frame.

11. (cancelled)

12. (original): The method according to claim 1 wherein said clients comprise off-the-shelf internet browser software.

13. (original): The method according to claim 1 further comprising:
storing said sequence at said camera coordinator.

14. (original): The method according to claim 1 wherein said storing comprises storage of data sets for which incidents were detected for later transmission as requested by an image server.

15. (original): The method according to claim 1 wherein said image server includes a network interface with a high bandwidth capacity allowing for multiple simultaneous client connections.

16. (currently amended): A method of surveillance using ~~for viewing~~ image data from at least two ~~one or more~~ cameras comprising:

capturing a plurality of still frames as arrays of digital data;

designating a frame in said plurality as a full frame;

for a frame subsequent to said full frame, computing a differential frame wherein a pixel in said differential frame that is within a threshold of a geometrically corresponding pixel in a preceding frame is set to transparent;

for a frame subsequent to said full frame, computing a percentage difference indicating a degree of change of pixels from a preceding frame;

transmitting a full frame, one or more differential frames, and one or more computed percentages to a camera coordinator;

determining at said camera coordinator that an incident has occurred using rules-based logic to analyze data received from said at least two cameras ~~frame grabber~~;

storing frame data, image data, and incident data;

transmitting frame data to an image server; and

presenting frame data by said image server to one or more clients for viewing by one or more users.

17. (currently amended): A method for capturing, analyzing, and presenting image data from a plurality of digital image capture devices comprising:

capturing a plurality of digital image frames;

producing a plurality of sequences,;

determining whether an incident is associated with one or more frames by analyzing captured image data from two or more of said plurality of digital image capture devices;

storing said plurality of sequences; and

presenting one or more sequences to a client viewer in response to a viewer's request or when an incident is associated with a sequence.

18. (currently amended): The method according to claim 17 wherein said determining further comprises computing a percentage of pixels that have changed in one frame from one or more preceding frames.

19. (original): The method according to claim 17 wherein said sequence stored at said image server is stored in a format designed for still image display on a client browser.

20. (original): The method according to claim 17 wherein said storing comprises storage of sequences for which incidents were detected for later transmission as requested by an image server.

21. (currently amended): A method for viewing image data from one or more cameras comprising:

capturing image data at a plurality of cameras, said plurality of cameras each associated with at least one digital information processing device able to store digital data representing images;

generating, from said image data from said plurality of cameras, a sequence of digital image data sets representing ~~visually perceptible images~~ of interest comprising data that can be transmitted over a digital communications channel wherein images of interest are determined using data from two or more cameras analyzed using a rule set;

transmitting said sequence over a first communication network connection to an image server, said image server not local to at least one of said cameras and not local to one or more client viewing locations wherein a principal function of said image server is image delivery to client software for presentation to an observer and wherein said server's delivery of image data allows a client viewer to display a pseudo real time representation of an image seen by a camera;

storing said sequence at said image server;

from said image server, in response to a request from a plurality of remote clients, transmitting said image sequence data over a second network connection to one or more clients for viewing, such that said clients do not directly connect over said first network connection to said plurality of cameras; and

wherein said image server allows a plurality of users to view images encoded as simple static images~~-coding~~.

22. (previously added): The method according to claim 21 wherein said sequence stored at said image server is stored in a format designed for still image display on a client browser.

Claims 23- 26 (cancelled)

27. (new): The method according to claim 1 further wherein:

said camera coordinators include logic for performing at least two of the following on data sets from multiple of said cameras:

- detecting an incident comprising one or more data sets from one or more cameras;
- resolving incidents from multiple cameras into an incident sequence;
- image recognition;
- determining incidents using a rules-based engine; or
- generating security alarms based on image data.

28. (new): The method according to claim 1 further wherein:

said camera coordinators include an interface for sending control signals to one or more cameras to affect one or more camera functions.

29. (new): The method according to claim 28 further wherein said control signals comprise:

establish rules regarding when frames should be transmitted or regarding adjusting tolerance levels for determining if an alarm should be transmitted.

30. (new): The method according to claim 1 further wherein:

said coordinators determine if an incident occurred by using a logical process accounting for time of day, day of the week, nature of the pixel change detected, and data sets received from two or more of said cameras.

31. (new): The method according to claim 1 further wherein:

said camera coordinators indicate to said server detected incidents or changes of an image that allow said server to intelligently control a view of one or more connected clients by changing the view of images displayed at the clients or by creating new windows and directing images to those new windows.

32. (new): The method according to claim 1 further wherein:

said coordinators include an incident and history database for their connected cameras and can playback stored incidents;

said coordinators can connect multiple incidents, triggered at multiple cameras, into an incident sequence;

said coordinators have positional and view information about each camera and information about overlapping regions of cameras;

said coordinators perform time-stamping for data sets and/or incidents;

said coordinator provide a management interface allowing a user to perform various management functions, such as setting time parameters for whether incidents from particular cameras will be of interest, establishing other rules definitions; specifying alerts regarding cameras that have not reported; installing new software and other maintenance functions; and

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said coordinators perform advanced image processing tasks such as image recognition or tracking a person or object identified in an image or determining that an object is coming toward or moving away from one or more of its connected cameras.
